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CLAIMS:

What is claimed is:

- 1 1. A method in a secure gateway for sharing a multiple
- 2 gateway automated data storage system containing a first
- 3 data storage unit with data stored within the first data
- 4 storage unit, comprising the steps of:
- 5 transmitting the data from the first data storage
- 6 unit within a first automated data storage system to a
- 7 second data storage unit;
- 8 receiving a request from a second data storage
 - system for the second data storage unit; and
- 10 transporting the second data storage unit to the
- 11 second data storage system.
 - 1 2. The method of claim 1, further comprising:
- 2 generating a identification qualifier for the second
- 3 data storage unit.
- 1 3. The method of claim 1, wherein the first automated
- 2 data storage system is a source automated data storage
- 3 system.
- 1 4. The method of claim 3, wherein the source data
- 2 storage system is an unclassified data storage system.

- 1 5. The method of claim 1, wherein the second data
- 2 storage system is a destination automated data storage
- 3 system.
- 1 6. The method of claim 5, wherein the destination data
- 2 storage system is a classified destination data storage
- 3 system.
- 1 7. The method of claim 1, further comprising:
- 2 updating a control data set managed by an automated
- 3 library data storage system library server.
- 1 8. The method of claim 7, wherein the control data set
- 2 is integrated into the automated data storage system
- 3 library server.
- 1 9. The method of claim 7, wherein the control data set
- 2 is external to the automated data storage system library
- 3 server.
- 1 10. The method of claim 7, wherein updating the control
- 2 data set comprises:
- decataloging the second data storage unit from the
- 4 first automated data storage system; and
- 5 notifying the automated library data storage system
- 6 library server that the second data storage unit has been
- 7 removed from the first automated data storage system.

- 1 11. The method of claim 7, wherein updating the control
- 2 data set comprises:
- 3 cataloging the second data storage unit into the
- 4 second automated data storage system; and
- 5 notifying the automated library data storage system
- 6 library server that the second data storage unit has been
- 7 received at the second automated data storage system.
- 1 12. The method of claim 1, wherein transporting the
- 2 second data storage unit to the second data storage
- 3 system further comprises:
- 4 controlling movement of a robot within an automated
- 5 library data storage system library server.
- 1 13. The method of claim 1, wherein the multiple gateway
- 2 automated data storage system comprises at least two
- 3 automated data storage systems.
- 1 14. A system in a secure gateway for sharing a multiple
- 2 gateway automated data storage system containing a first
- 3 data storage unit with data stored within the first data
- 4 storage unit, comprising:
- 5 transmitting means for transmitting the data from
- 6 the first data storage unit within a first automated data
- 7 storage system to a second data storage unit;
- 8 receiving means for receiving a request from a
- 9 second data storage system for the second data storage
- 10 unit; and

- 11 transporting means for transporting the second data
- 12 storage unit to the second data storage system.
- 1 15. The system of claim 14, further comprising:
- 2 generating means for generating a identification
- 3 qualifier for the second data storage unit.
- 1 16. The system of claim 14, wherein the first automated
- 2 data storage system is a source automated data storage
- 3 system.
- 1 17. The system of claim 16, wherein the source data
- 2 storage system is an unclassified data storage system.
- 1 18. The system of claim 14, wherein the second data
- 2 storage system is a destination automated data storage
- 3 system.
- 1 19. The system of claim 18, wherein the destination data
- 2 storage system is a classified destination data storage
- 3 system.
- 1 20. The system of claim 14, further comprising:
- 2 updating means for updating a control data set
- 3 managed by an automated library data storage system
- 4 library server.

- 1 21. The system of claim 20, wherein the control data set
- 2 is integrated into the automated data storage system
- 3 library server.
- 1 22. The system of claim 20, wherein the control data set
- 2 is external to the automated data storage system library
- 3 server.
- 1 23. The system of claim 14, wherein the updating means
- 2 for updating the control data set comprises:
- 3 decataloging means for decataloging the second data
- 4 storage unit from the first automated data storage
- 5 system; and
- 6 notifying means for notifying the automated library
- 7 data storage system library server that the second data
- 8 storage unit has been removed from the first automated
- 9 data storage system.
- 1 24. The system of claim 14, wherein the updating means
- 2 for updating the control data set comprises:
- 3 cataloging means for cataloging the second data
- 4 storage unit into the second automated data storage
- 5 system; and
- 6 notifying means for notifying the automated library
- 7 data storage system library server that the second data
- 8 storage unit has been received at the second automated
- 9 data storage system.

- 1 25. The system of claim 14, wherein the transporting
- 2 means for transporting the second data storage unit to
- 3 the second data storage system further comprises:
- 4 controlling means for controlling movement of a
- 5 robot within an automated library data storage system
- 6 library server.
- 1 26. The system of claim 14, wherein the multiple gateway
- 2 automated data storage system comprises at least two
- 3 automated data storage systems.
- 1 27. A computer program product in a computer readable
- 2 medium for sharing a multiple gateway automated data
- 3 storage system containing a first data storage unit with
- 4 data stored within the first data storage unit,
- 5 comprising:
- 6 first instructions for transmitting the data from
- 7 the first data storage unit within a first automated data
- 8 storage system to a second data storage unit;
- 9 second instructions for receiving a request from a
- 10 second data storage system for the second data storage
- 11 unit; and
- 12 third instructions for transporting the second data
- 13 storage unit to the second data storage system.
 - 1 28. The computer program product of claim 27, further
 - 2 comprising:

- 3 fourth instructions for generating a identification
- 4 qualifier for the second data storage unit.
- 1 29. The computer program product of claim 27, further
- 2 comprising:
- 3 fifth instructions for updating a control data set
- 4 managed by an automated library data storage system
- 5 library server.
- 1 30. A secure gateway apparatus for sharing a multiple
- 2 gateway automated data storage system, the apparatus
- 3 comprising:
- 4 a controller that controls transporting a data
- 5 storage unit from a first data storage device to a second
- 6 data storage device; and
- 7 a transportation device that transports the data
- 8 storage unit from the first data storage device to the
- 9 second data storage device, wherein the transportation
- 10 device protects against transporting the data storage
- 11 unit from the second data storage device back to the
- 12 first data storage device.